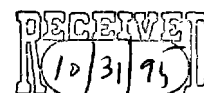


CSSP



CHILD SURVIVAL **GRANT** IX  
FOR THE RURAL COMMUNITIES  
IN THE ALTIPLANO, BOLIVIA

Funded by USAID Through  
Cooperative Agreement No. FAO-0500-A-00-3021-00

September 1993 - August 1996

PLAN INTERNATIONAL ALTIPLANO  
LA PAZ, BOLIVIA

MID TERM EVALUATION

September 1995

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## ACRONYMS **AND** ABBREVIATIONS

<b>ARI</b>	Acute Respiratory Infection
CAI	Committee for Analysis of Information
CDD	Control of Diarrheal Diseases
CHW	Community Health Worker, Health Promotor
cs	Child Survival, USAID funded
CSI	Bolivian Child Growth and Vaccine Card
DIP	Detailed Implementation Plan
ENDSA/DHS	National Demographic and Health Survey (1994)
EPI	Expanded Program of Immunization
GMP	Growth Monitoring and Promotion
<b>HIS</b>	Health Information System
KPC	Knowledge, Practices and Coverage Survey
MH	Maternal Health
MOE	Ministry of Education
MOH	Ministry of Health
MTE	Mid Term Evaluation
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
TH	Traditional Healer
TBA	Traditional Birth Attendant
<b>RAN</b>	Rural Auxiliary Nurse
SNIS	MOH National Information System
SVEN	National System for Epidemiological Vigilance of Nutritional Status
TT2, TT5	Tetanus Toxoid 2 or 5 doses
URO-P	Oral Rehydration Unit on the community level
<b>USAID</b>	United States Agency for International Development

## 1. ACCOMPLISHMENTS

PLAN International received financing from USAID under cooperative agreement FAO-0500-A-00-3021-00 for the implementation of a Child Survival program focusing on institutional strengthening through the improvement of referral, supervision, information and logistics systems for the immunization (EPI), control of diarrheal diseases (CDD), growth monitoring and promotion (GMP), acute respiratory infections (ARI) and maternal health (MH) programs in the Altiplano area of Bolivia for 36 months, September 1993 to August 1996. At the time of the Mid Term Evaluation (MTE) the project had been operating for 24 months.

Main project strategies include:

- \* Education in all levels; community, Community Health Worker (CHW), Rural Auxiliary Nurses (RAN), with PLAN providing training for counterpart staff in the Ministry of Health (MOH);
- \* Interinstitutional coordination with two health districts (Los Andes Manco Kapac and Santiago de Machaca) and other NGOs;
- \* Supervision and monitoring of project activities.

The estimated beneficiary population from the Detailed Implementation Plan (DIP) was 54,499 with a predominant Aymara Indian population. The target population receiving direct services from PLAN is located in two provinces in the Department of La Paz. An additional two provinces receive indirect services through strengthening activities with the districts. Approximately 200 communities receive direct services in the target area, and an additional 44 communities have been designated Pilot Communities which receive intensified education.

Sources of information for measuring project accomplishments are:

- \*\* MOH information system (SNIS)
- \*\* National Health Survey 1994 (ENSA/DHS)
- \*\* Midterm Evaluation August 28 - September 14, 1995) results: mini-survey of 237 women taken during 5 days of the field visits in 30 communities. The mothers surveyed were only partially randomly selected, the survey group was selected from a group of self-selected women who attended a community meeting, or whose houses were located within a moderate distance from the health center.

Interviews were held with 27 CHWs, 3 TBAs and visits made to 10 health centers, where MOH staff was interviewed. Also focus groups were held with community leaders in 25 communities and 27 Community Registers were reviewed. General observations as to project accomplishments and comparison with DIP projections can be drawn from the following table. Specific observations will be made for each of the 12 objectives.

#### Objective 1 Children with Completed Vaccine Series

According to the MTE survey of 237 women with children under two, 81.9% of children had received the complete vaccine series (DPT3, Polio3, BCG and Measles). This surpasses the objective of 80% and shows a substantial increase compared with the Baseline data of 53%. According to a review of data from the community registers, 73% of children between 12-23 months of age were completely vaccinated, but this difference is probably due to incomplete registration of information in the registers.

#### Objective 2 Women with 5 doses of Tetanus Toxoid (TT5)

The community register showed a level of 18% of pregnant women with 5 doses which is lower than the Baseline figure of 20%. The MOH is only focusing on giving 2 doses to all pregnant women rather than all women of fertile age, and has stopped monitoring information on doses over TT2. As PLAN's strategy includes working within MOH guideline and in view of the fact that in order to obtain five injections of TT requires 2 years and seven months ( 1st + 1 month, 2nd + 6 months, 3rd + 1 year, 4th + 1 year) according to MOH protocol, this objective should be reviewed by PLAN as to it's acceptability. With the information being collected by the communities, it would be more feasible to measure if the target population was limited to pregnant women.

#### Objective 3 Children with diarrhea adequately treated at home

The MTE survey of mothers showed that 93.4% are rehydrating their children at home. Baseline data showed that 47% of women were rehydrating with Oral Rehydration Solutions (ORS) . The expanded definition of the current objective includes ORS plus other traditional teas given with diarrhea (camomile, mint, anise, etc.) Breastfeeding was not measured during the MTE but due to the very high rate of breastfeeding in the Altiplano area, it can be assumed that the objective of 80% of children receiving ORS, other liquids and breastmilk will be reached by the end of the project.

#### Objective 4 Children weighing below 2 Standard Deviations

The monitoring tool utilized in Bolivia for weight for age in the under 5 population is the SVEN (System for Epidemiological Vigilance of Nutritional Status). The districts presented data from January - August of 1995 which showed that only 10% of children under 2 years of age are greater than 2 standard deviations below the mean in weight for age (NCHS) . These results are rather surprising, and show that PLAN has reached the goal of reduction of malnutrition from 19.2 percent at the beginning of the project to less than the proposed 15%. As the statistics presented vary greatly from the national average for the Altiplano area (15.6% ENDSA 1994) additional verification of SVEN results is necessary.

The MOH has dropped SVEN statistics from its information system (SNIS) as of July of this year so that PLAN is not currently able, nor will they be able in the future, to monitor this objective through the SNIS. A SVEN should be completed by PLAN at the time of the final evaluation in order to measure this goal. Results of the MTE interviews found that both CHWs and RANs lacked sufficient knowledge levels concerning specific action messages to the parents of children suffering from growth faltering.

Objective 5 Children with pneumonia referred to CHW/health center  
According to the MTE, 5% of women with children suffering from AR1 in the last two weeks referred their child. The ENDSA/DHS shows the prevalence of pneumonia is 18% of children in the Altiplano. This information can be used to deduce that approximately 42% of women with children suffering from pneumonia referred their child to a health center or CHW.

Objective 6 Adequate care for children with pneumonia  
In interviews with CHWs 80% stated that a child with rapid breathing should be referred to a health center. CHWs do not have antibiotics nor basic medicines for treating ARIs and so their knowledge is consistent with MOH protocol. According to the community register, only 1% of cases of AR1 were actually referred to a health center, showing a wide gap between knowledge and practice. This difference can also be explained by inaccuracies in the register.

Interviews with RANs showed a high level of knowledge of MOH treatment protocol but in 30% of the health facilities visited no antibiotics were available for AR1 treatment.

#### MATERNAL HEALTH

Objective 1 Parents recognizing danger signs for pregnancy  
Men were asked during focus groups and none of the groups could identify the four signs specified by the project (fever, hemorrhage, edema and headache). CHWs were also unable to identify the four signs. Both groups could identify 2 or 3 of the four specified danger signs; CHWs 78% and groups of men 64%. Women were not specifically questioned but with continued training during the next year, the goal of 60% can realistically be met.

Objective 2 Hemorrhage/Infection treated by Traditional Birth Attendant (TBA)  
During the MTE only three TBAs were identified in the 30 communities visited by the evaluation team. Of the three, none reported any cases of hemorrhage or infection during the last six months. In 10 health centers (including 2 area hospitals) the total number of hemorrhages treated was 11 and infections, 8, in a six month period. As only 13.5% of births

are attended by TBAs and MOH protocol states that hemorrhage and infection should be treated at the area level, this objective does not reflect the reality of maternal care in Bolivia.

Objective 3 Hemorrhage/Infections referred treated adequately

Of the three TBAs interviewed during the MTE, none reported any cases of hemorrhage or infection. No mechanism exists for tracking cases referred for maternal hemorrhage or infection. Health personnel exhibited an understanding of treatment procedures but may lack essential drugs for treatment. Insufficient information as to the main causes of maternal mortality limited the applicability of this objective. PLAN should review this objective with a view towards prioritizing activities for the remainder of the grant period.

Objective 4 Prenatal examination by TBA

Same comment as Objective 2, MOH protocol states that prenatal care should be carried out by a trained RAN, nurse or physician.

Objective 5 Women in community register have 1 prenatal visit

A review of the community registers in 27 communities included a total of 84 pregnant women, and showed that 70% had at least one prenatal visit by a RAN. According to the MTE survey, 41% of women stated that they had at least one prenatal visit during their last pregnancy. This rather large difference may be explained by the total number of women who are registered in the community register. The approximate population of the 27 communities visited is 9,600, calculating a 4% pregnancy rate, approximately 256 women should have been registered during the 8 months of 1995. Taking into account temporary migration and unreliable population statistics, it would still be expected that more than 84 pregnant women would be recorded during the last 8 months. It was observed that the CHWs in many communities only register those women who actively participate in the program, not the total population of the community. This of course leads to an abnormally high percentage of women receiving prenatal care. The 41% found in the MTE survey compares more favorably with the average for the Altiplano of 43%<sup>1</sup>.

Objective 6 Use of clean birth kits in home births

Of the 237 women surveyed during the MTE, 20.5% of those who delivered at home used a clean birth kit. If only women who received prenatal care are looked at, the usage of the kits increased to 48%. One of the factors limiting the use of

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<sup>1</sup> ENDSA/DHS 1994

clean birth kits is the requirement that a minimum number of prenatal visits must be made before the kit is given to the pregnant woman. This number of visits range from 2 to 4, depending on the RAN's criteria. As only approximately 30%<sup>2</sup> of women are identified by health services before their fifth month of pregnancy, it makes it difficult to reach the MOH goal of four controls. According to information received during MTE interviews, 50% of births (4/8) attended by TBAs used a clean birth kit, and 31% (16/51) of home births attended by MOH personnel.

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<sup>2</sup> SNIS Districts of Santiago and Los Andes, 1995



## 2. EFFECTIVENESS

If the PLAN CS-IX project is viewed strictly according to the stated objectives, the results are not completely positive. The project has made very good progress in areas which are not being specifically measured. For example in the production of excellent quality educational materials and a complete program of training for communities and MOH staff.

Many of the objectives were written with the rather ambitious idea of introducing, in pilot areas, new treatment protocols which more directly involved community level workers. In the objectives for treatment of maternal hemorrhage and infection, and in providing prenatal care by TBAs, the project had thought that it would be possible to introduce these fundamental changes within the MOH. This has not proven to be the case and the MOH has not approved these changes, making those objectives unfeasible at this time.

Changes have also been made in MOH policy concerning Tetanus vaccines for women which have been previously discussed (Section 1. Objective 2). The MOH suffers from frequent changes in personnel at all levels. These changes often result in changes in policy, completely outside of the sphere of influence of a counterpart NGO such as PLAN. Another example of this is the decision to remove SVEN data from the SNIS, making monitoring of this indicator much more difficult for PLAN. As these changes occur, the implementing NGO must make adjustment in their program to reflect these policy modifications.

During the first Annual Report, PLAN decreased the percentage of parents with children under 2 who were able to recognize 4 danger signs during pregnancy from 80% to 60%. Other changes were made in objectives dealing with treatment by TBAs, but as has been previously discussed, these changes in treatment protocol were not acceptable to the MOH.

Targeted high risk groups are effectively being reached (children under 2 and pregnant women). The problem in reaching all of the population lies with the work of the CHW in collecting information and providing services to all members of the community. This will require a more proactive role for the CHW, not waiting for community members to seek him out, but seeking out all possible high risk women and children.

A summary of accomplishments of the project at the time of the MTE compared with anticipated targets is presented on pages 2 -5. If adjustments are made in the objectives of the project, as outlined in the recommendations section of this report, it is probable that the project can make a significant impact on the health of

communities within the two health districts by the end of the funding period.

Several major constraints exist to meeting the stated objectives;

1) Temporary migration effects all communities as younger members seek out better economic possibilities in the urban areas, leaving only the young and old to continue with normal community activities.

2) Division is seen in communities caused by evangelist groups which forbid their members from participating in community groups outside of religious meetings.

3) A limitation to achieving high rates of Tetanus vaccination is the belief in some areas that the vaccine is a subversive action to sterilize women. Focusing only on pregnant women may help to alleviate this barrier.

4) Despite the fact that PLAN has a signed agreement with the MOH insuring the permanence of MOH staff for a minimum of either 2 or 3 years, the turnover continues to be very high. This greatly effects the continuity of activities and as was discussed in Section 1, the ability to introduce innovations in service delivery.

### 3. RELEVANCE TO DEVELOPMENT

PLAN has developed a decentralized methodology which includes the formation of multi-disciplinary teams in each area. These teams work together with counterpart agencies to increase coverage utilizing strategies inherent to the cultural and educational characteristics of each area. PLAN has a good reputation in the communities and through strategies of community outreach has been able to reach a great number of communities with limited personnel.

PLAN has the added advantage of receiving funding from a variety of sources, providing them with the ability to integrate activities into a complete package of development strategies. The three main components of PLAN's activities are: health, education, and economic development. During the MTE it was observed that credit programs, in the form of community banks, provide a captive audience for health messages, as well as improve the economic situation of women, which has been shown to have a positive impact on the health of the children.

PLAN matching funds for this grant were used for the construction of approximately 9 gravity water systems, or systems of wells and hand pumps, and 2 latrine programs, in communities where health activities are simultaneously being carried out. The program is constructing (with community counterpart funds and labor) three types of latrines; pit, composting and water seal. In an effort to improve use of the latrines, PLAN will focus on the use of a greater percentage of water seal latrines during the next year.

Other complementary projects include improvement of roads and bridges which provide better access to health services. Projects in education, especially literacy training for women and preschool centers have a direct impact on improving the health of the family.

The PLAN project has created a demand for health education by providing lunch/snack at educational sessions which has provided an additional motive for participation in MOH programs. This additive effect, while not sustainable in the long term, does facilitate the formation of positive habits in seeking health services.

One of the weaknesses observed during the MTE was a lack of coordination with elected, and other natural, community leaders. As PLAN has proposed to "empower" communities according to the DIP, the community as a unit and political entity needs to be strengthened. In order to insure sustainability of project activities, a better developed strategy for involving all community members and leaders in project management is needed.

## 4. DESIGN AND IMPLEMENTATION

### 4.1 DESIGN

Several significant changes were made in the project design due to influences primarily external to PLAN. In the DIP, a well developed strategy was presented for involving traditional healers (TH) in education and treatment of diseases. This strategy had to be abandoned due to lack of interest on the part of the TH and inability to change MOH policy on treatment by persons other than trained RANs.

Community based treatment center for AR1 (IRA-P) was not implemented due to MOH policy that limits the role of the CHW in treating with medicines and the results of a negative experience in the zone by another NGO.

An integration of health activities within the state school system was proposed and some progress has been made in this strategy, unfortunately Bolivia has been attempting to make sweeping educational reforms during the last year. These changes have been met with strong opposition on the part of many teachers and labor leaders, leading to months of civil unrest, violence and extensive changes of personnel within the Ministry of Education. PLAN continues to seek opportunities for coordination with teachers and Ministry personnel, but it is questionable whether significant progress can be made within the next 12 months.

### 4.2 MANAGEMENT AND USE OF DATA

The CS-IX project utilized as its Baseline the CS VI final survey, completed in 1993. This baseline was extensively used in the formulation of the DIP and for measurement of project objectives. A KPC survey will be completed as part of the Final Evaluation which will permit the project not only to evaluate the present project, but also serve to guide PLAN in future health activities.

A review of the Health Information System (HIS) was included as part of the MTE. PLAN does not have a separate HIS but collects some complementary data in each geographical area during the CAI (Committee for Analysis of Information) meetings. As the main objective of the project is to strengthen the systems of the MOH, PLAN opted to utilize only the information system of the MOH, SNIS. This strategy has some inherent weaknesses in that a total dependence on the SNIS does not provide any methodology for an independent verification of the SNIS data. Another weakness is that the MOH obviously can make unilateral changes in the SNIS which adversely effect PLAN's ability to monitor their objectives. Examples of SNIS forms are included in Annex B.

The main advancement made in this area has been the incorporation of the community as part of the HIS of the MOH. A Community Register has been implemented in all communities and all CHWs have received training in use of the instrument. It was observed during the MTE that a great deal of confusion exists concerning the use of the Register and under-reporting, as was previously discussed in Section 1, MH Objective 5. Example of the Community Register is included in Annex B.

A feedback loop is partially operational at the community level which enhances decision-making and serves as a strategy for empowering communities. PLAN has developed a chart (See Annex B) for use in the communities which shows the number of: cases of AR1 and diarrhea, children vaccinated, pregnant women receiving prenatal care, and children weighed. The system is very well designed but according to the MTE only 29% of community leaders had received information utilizing the chart in community meetings. Only 26% of the CHWs reported that they were using the chart in community meetings.

PLAN has a full time computer specialist (not covered by this grant) whose contact with the health program has been limited to providing technical help with the census.

PLAN is currently in the process of restructuring their 4 offices within Bolivia (Sucre, Santa Cruz, Tarija, and Altiplano). One of the results of this restructuring will be an increased sharing between offices. This process has already begun with several meetings between health coordinators of the 4 offices to develop a national plan. The Altiplano office has many experiences to share with the other Bolivian offices. On a regional level (South America) PLAN permanently employs a Regional Technical Advisor in Health, Dr. Luis Tam, whose role is to enhance institutional learning within the region and between PLAN regions.

#### 4.3 COMMUNITY EDUCATION AND SOCIAL PROMOTION

Service delivery in this project is limited. Community education is provided through meetings with mothers' groups, community courses, and by mass media utilizing local radio. The activities are conducted by MOH personnel and CHWs. PLAN plays a supervisory and supportive role, as well as providing educational materials, training and incentives to the communities to attend the courses.

Participative methodologies are used in all educational activities and appear to be effective in transmitting the educational messages. Community courses originally focused on women but are now attempting to include all community members. MOH staff and CHWs are motivated by the materials which they have received and the sessions appear to be reaching the target population with a notable positive impact, for example in the increase in prenatal care. Effectiveness is greatly enhanced as educational activities

are presented in the native language, Aymara. The radio messages are also transmitted in Aymara.

According to the MTE 71% of women surveyed stated that they had participated in a community course. Detailed information concerning topics covered is included in Annex A.

The following educational materials were developed by PLAN, are of excellent quality and compel the use of participative methodologies. (Examples included in Annex C)

- \* A series of five flipcharts on maternal health which include prenatal care, problems and dangers during pregnancy, safe and clean birth, complications during birth, and postnatal care of mother and child.

- \* A series of cards with picture messages were developed covering 19 health topics which can be adapted for use in 14 different traditional games.

- \* Handouts for mothers on 9 topics are well adapted for people with limited or no literacy skills, which can also be used to evaluate levels of knowledge during home visits (Hojas Domicilarias)

- \* A book of herbal remedies developed with several other NGOs contains photos, descriptions, and uses for 100 plants commonly available in the Altiplano for use by CHWs and community leaders.

The educational materials developed were based on information obtained from focus groups, in-depth interviews and pilot testing in the communities. PLAN has adapted previously field tested materials which take into consideration the cultural differences of the population from the MotherCare project in Cochabamba, Bolivia. Competent professionals were hired to assist in the development of the materials which has paid off in quality of the materials.

PLAN sponsors a 15 minute weekly radio program in Aymara which helps to reinforce health messages to the target area. An evaluation of the program was completed in 1994 but is unfortunately of poor quality and therefore no concrete information is available as to the effectiveness of this strategy.

The educational materials have been distributed and training sessions held in use of the materials for health centers and CHWs and are currently being used. Problems exist with the use of these materials. It was found in the MTE that although almost all CHWs had received training in the use of the Hojas Domicilarias, none of them were using them to their complete potential, i.e. as an evaluation tool. PLAN has developed an excellent concept for the use of this material, but lack of appropriate training and followup have diminished their value.

There is little focus in the project on teaching CHWs how to teach. Some MOH staff received "Training for Trainers" education, although these methods have not been passed on to the community volunteers.

PLAN has developed a format for supervising training sessions, which helps to assure quality control and consistency of messages in training sessions.

No evaluation instruments have been developed for evaluating CHW, TBA or community comprehension.

Forty-four pilot communities were selected to receive double the number of community courses (4 instead of 2) and closer monitoring from PLAN. Results from the survey show that 85% of women in pilot communities had attended course, compared to 64% in non-pilot communities. Most indicators did not show a significant difference between the two types of communities, but there were some notable variations. 45% of women in pilot communities received prenatal care compared with 33% in non-pilot. 17% of women in pilot communities used a clean birth kit, compared to 22% in non-pilot, the opposite of what would be expected. Prevalence of ARIs was lower in pilot (61%) compared with non-pilot (71%). Complete results of the survey are included in Annex A.

#### 4.4 HUMAN RESOURCES FOR CHILD SURVIVAL

The PLAN health project consists of the following staff: Health Coordinator, Dr. Silvia Villarroel; 2 Supervisors, Lourdes Aquize and Clotilde Ramos; 4 Health Facilitators, Lidia Espinoza, Modesta Huanca, Basilio Gomez, and Nicolas Mamani. Personnel costs are not included in this grant. PLAN provides administrative and logistical support for the health project. An organizational chart is included in Annex D.

The entire PLAN Altiplano staff consists of 31 full time permanent employees. The office shows a great deal of stability with 48% of the staff working for PLAN for 10 years or more. There has been some recent turnover which has adversely effected the Health project with a 16% turnover in the last 2 years, including the Health Coordinator and Program Coordinator, two key positions which directly effect the CS project.

The PLAN staff forms three multi-disciplinary teams, one for each planning area, coordinating with counterpart staff to provide direct services, education and followup of project activities. The current number and type of human resources within the project appears to be sufficient for meeting project objectives.

In general, project staff is well qualified and with the exception of the Health Coordinator, all speak Aymara. The health staff have attended the following training workshops:

PLAN International V Workshop in Cuenca, Ecuador for 11 days, was attended by 2 health staff. Topics were: Information System and Evaluation Methodologies, July 1995.

PLAN International IV Workshop in La Paz, Bolivia for 11 days, was attended by 4 of the current staff. Topics were Educational Methods, AID/HIV, Reproductive Health, and review of ARI, EPI and CDD, April-May 1994.

Other training include workshops of analysis with the MOH, educational methodologies, Training for Trainers,

#### COMMUNITY VOLUNTEERS:

PLAN utilizes volunteers working at the community level. There are an estimated 220 CHWs and 95 TBAs working in the project area. A particularly strong strategy of the project is the coordination with existing community health promoters (CHW). These community members have many years of experience and provide a stable contact with the communities. 41% of CHWs have worked for 5 to 10 years and 11% for more than 10 years. The project collected information on turnover rates of community volunteers in 1993 which showed a 18% turnover rate. During the MTE 27 CHWs were asked concerning their workload, 59% indicated they worked an average of 1 to 2 hours per day or 1 to 2 days per week as a CHW. 22% said they worked less and 19% said they worked more. None of the CHWs mentioned that their activities as CHW utilized an excessive amount of their time.

A summary of training of counterpart staff and volunteers is included in the following table. Training curriculums are included in Annex C.



**CHILD SURVIVAL TRAINING PROGRAM**

Type/#	Training Topics.	Topic Hours	Training Method for Topic
<u>MOH Nurse RANs</u> Total (56) During FY 95 3 courses	Maternal Health Use of training materials	8 hours X 2 days = 16 hours	Use of Clean Birth Kit and Birth Mannequin Small grps
<u>Traditional Birth Attendants</u> Total (95) During FY 95 8 courses given	Maternal Health	6 hours X 4 days = 24 hours	Role playing, explanation of topics, small group work, flipchart, Questions & Answers
<u>Communities</u> A total of 460 courses in variety of topics, approximately 2000 participants during FY 95	ARI, EDA, SM, GMP, and EPI	Course are held for 2 days in each community, for 6 hours each day = 12 hours	Demonstration Role playing Flipcharts Games Brainstorming Explanation of topics Questions and Answer
<u>CHW, RAN, TBA, MOH Personnel, Community Leaders</u> Monthly CAIs are held on Sector (57), Area (12) and District (2) level	Topics vary each month based on weaknesses identified during supervision and from Information System	Each CAI is for 1 day per month = 6 hours	Analysis of data Discussion of problems Consolidation form Others according to topic

#### 4.5 SUPPLIES AND MATERIALS FOR LOCAL STAFF

PLAN provides very few supplies directly to the CHWs, TBAs or RANs. All material is provided to the Health District for distribution. These include educational materials, supervision forms and reporting forms for TBAs.

During the MTE both URO-P (Rehydration Units manned by CHWs) and health centers were visited and required basic supplies were inventoried. The main problems identified were:

Health centers-	30% lacked Maternal Control Cards (Sample in Annex B) making it impossible to record prenatal care
	30% lacked basic antibiotics for treatment of AR1 and other curative services
URO-P-	30% lacked scales for weighing children (but most were able to coordinate with a RAN or other NGO to complete weighing sessions)
	48% lacked growth cards and 70% lacked the colored yarn for marking the cards according to growth patterns thus inhibiting the CHWs ability to weigh new children or to provide education to the mother.

Complete results of the inventory are included in Annex A.

#### 4.6 QUALITY

The project has completed many community courses in the 244 communities during first two years of the project. The primary participants in these course are women with children under 5 and PLAN has been expanding these courses to include all of the community. The courses have covered topics of ARI, CDD, EPI, GMP and Maternal Health. Specific messages are included in each educational session based on desired changes in behavior for each intervention. A list of basic messages is included in Annex C.

The communities had the opportunity to participate in community planning sessions and prioritized health as a major concern, they are more motivated to attend educational sessions and change behaviors.

The level of abilities of both project and MOH staff and CHWs varies widely. Qualitative interviews with project participants by the evaluation team showed that in approximately 64% of the groups interviewed men could identify 2 or 3 danger signs during pregnancy. 78% of the CHWs could mention 2 or 3 danger signs and 100% of RANs could mention 4 or more. In order to meet project objectives, more emphasis needs to be placed on training at the community and CHW level. Men are an important target because their

opinion weighs heavily in family decisions on health behaviors, especially in seeking care at health centers.

During interviews with mothers, a large number could correctly identify home based treatment for both respiratory infections and diarrhea. The high level of correct responses shows that educational methodologies are effective and women report that they are putting into practice what they have learned. Complete results of the evaluation are included in Annex A.

There is not a formalized evaluation process of the community's knowledge level, but through informal questioning the staff is able to determine what points need to be taught and/or re-emphasized.

One of the major weaknesses of the project is the lack of focus on quality of services and quality care. This was one of the activities outlined in the DIP, but PLAN has not really focused on these issues. MOH area level staff attended a short course on quality, which was insufficient for more than a superficial introduction. This topic needs to be dealt with in depth and by qualified professionals, followed by extensive followup and supervision.

#### 4.7 SUPERVISION AND MONITORING

PLAN has prioritized the strengthening of the supervisory system within the two health districts, at the CHW, RAN and Area levels. Each level has specific responsibilities for supervision. The CHW is responsible for monitoring the knowledge and practices of families in his community, although as mentioned in Section 4.3 the Hojas Domicilarias designed for this purpose are not being adequately used.

The RANs are responsible for supervising the CHWs a minimum of every 3 months, although in the MTE 67% of the CHWs did not recognize the supervision form which is supposed to be used and 56% said they had received no supervision. Each RAN has the responsibility for supervising an average of 5 CHWs according to PLAN staff. The MTE showed an average of 7 CHWs per RAN.

The supervision is based on the functions of each level and includes problems detected, observations concerning problems and general recommendations. The form is neither signed by the person being supervised, nor is that person given a copy or any written results of the supervisory visit.

The project has also worked extensively on strengthening the CAI system. CAI is Committee for Analysis of Information and is an excellent strategy for monitoring project results and indirect supervision of staff. CAI meetings are held at all levels within the health structure on a monthly basis: Sector, 1 RAN with an average of 7 CHWs; Area, the area team with an average of 5 RANs;

District, the district team with an average of 6 areas. During Fiscal Year 1995; 57 CAI Sector meetings, 12 CAI Area meetings and 2 District level CAIs were held each month for one day each.

The CHWs bring to the CAI their Community Registers, in order to share with the RAN health problems detected/treated/referred, educational activities completed during the month, and any problems which occurred. The RAN has a consolidation form which is used each month to summarize activities, which are then reported in the SNIS. PLAN also collects information at the CAI meetings to use in monitoring the project. The CAIs are extensively used for continuous training based on problems identified by the CHWs or RAN. According to the MTE, 74% of the CHWs attended a CAI meeting the month proceeding the evaluation. The most important result from the MTE showed that the CHWs had a very good understanding of the objectives of the CAI and that they valued these meetings as an important source of support. 78% of the CHWs mentioned that the objective was to provide information to the RAN, 70% mentioned to receive training, 48% said for planning purposes and 30% mentioned to analyze information. This strategy has been well developed by PLAN and the districts and is an important source of training and indirect supervision at all levels.

Forms for supervisory visits have been developed to improve supervision at all levels. Copies of these forms, as well as the consolidation forms used in CAI meetings, are included in Annex B.

PLAN and the districts have made great strides in formalizing both the supervision and CAI systems in order to insure adequate monitoring for the project. The structure is in place but additional effort needs to be made to enhance the frequency of supervision and the quality of visits. Many MOH staff have a very traditional view of what supervision and monitoring should include. They view supervision as mainly a disciplinary action, not an opportunity to share ideas and improve work methodologies. More work needs to be done in improving the supervisory visits and CAI meetings to assure quality service delivery.

#### 4.8 REGIONAL AND HEADQUARTERS SUPPORT

PLAN's national staff expressed satisfaction with the quality and quantity of administrative and technical support which they receive from PLAN International Headquarters, PLAN Childreach in the United States and the regional PLAN office in Quito. Some limitations were observed in local budget control due to lack of sufficient communication but this does not appear to be a major constraint. PLAN's Regional Health Advisor, Dr. Luis Tam visited the project once during 1994 and twice during 1995 to provide technical support in planning and implementation. Karla Steele, Childreach CS Coordinator, visited PLAN Altiplano in July of 1994 to present an orientation to administrative staff concerning budget management.

PLAN has four offices within Bolivia, all of which have health projects with varying foci. The health staff in these four offices have formed a national team which has met several times during the last 2 years. The objective of this team has been to develop a national strategy in health and to share experiences and ideas.

#### 4.9 PVO'S USE OF TECHNICAL SUPPORT

Excellent use of local technical assistance in the development and validation of educational materials was observed during the first two years of the project. An ethnographic study of beliefs and practices concerning ARI was completed in 1994 which provided valuable cultural information.

During the remaining 12 months of the project the most urgent need is for expert assistance in developing quality care standards, a system for assuring quality control, and improved quality in administrative systems (supervision, information referral). An adequate amount to cover technical support is included in the project budget.

#### 4.10 ASSESSMENT OF COUNTERPART RELATIONSHIP

The main counterpart agency working with PLAN on the CS-IX project is the Ministry of Health. The relationship with the MOH was established a number of years ago during other Child Survival projects. A formal agreement was signed in 1993 for a period of five years. When the national government changed in 1994 an annex to the agreement was signed with the new MOH representatives which basically reiterates the original agreement and clarifies some of PLAN's strategies.

The Regional level of the MOH (La Paz) has expressed an interest in conducting combined supervisory visits with PLAN in order to better understand PLAN's field activities. This coordination has been attempted in the past with little success, but PLAN should once again extend an invitation.

The main level of coordination between PLAN and the MOH is at the District level. A structural chart of the two districts is included in Annex D. One of the district directors participated as a member of the evaluation team, and the other was an active participant in the evaluation analysis meeting (Results of the meeting included in Annex F).

Both district directors expressed satisfaction with the coordination with PLAN. It was easily observed that an excellent, open and productive relationship exists between PLAN and the districts. Good relations also were evident at the area and sector levels. It was observed during the MTE that not all project activities are in line with national policies. Changes need to be made to bring PLAN's activities back into accordance with MOH

guidelines.

The project also has close relationships with various other organizations; Equipos de Salud del Altiplano (ESA), Norwegian Mission Alliance, Samacmancafiani, Misiones Mundiales, Freedom from Hunger and San Gabriel. Interviews were held during the MTE with 5 representatives from the MOH, 10 Health Centers and Posts in the 2 districts, USAID, and 4 other NGOs. The consensus of all coordinating agencies was very positive towards PLAN.

It was mentioned that PLAN could improve their strategies for expansion into new communities by maintaining better communication with NGOs already working in the area.

The project is beginning to develop a new relationship with the Ministry of Education (MOE). This effort could potentially yield a very positive impact in the future. The current political situation in Bolivia limits the project's ability to move forward in this area. A law for educational reform is being implemented, which lead to months of teachers strikes and general civil unrest. PLAN and the MOE have developed a manual for use in the schools, based on UNICEF's Facts for Life. This manual has been put on hold due to the many changes in personnel within the MOE but PLAN hopes to be able to implement the use of this manual before the end of the funding period. The basic educational messages of the project are appropriate for inclusion into the official school curriculum. This appears to be an excellent strategy for expanding the project during the remaining grant period.

#### 4.11 REFERRAL RELATIONSHIP

The current referral system is based on hierarchical levels within the MOH. These levels are currently being changed (New structure in Annex D) in accordance with the Law of Popular Participation which was passed in 1993. The levels remain essentially the same, but with more emphasis on decentralization and local planning.

The structure exists for referral but the actual system is badly under used. Problems exist at all levels:

- \* Community- lack of economic possibilities to pay for services, lack of adequate transportation for accessibility to health services, lack of confidence in medical services, many times exacerbated by health personnel who lack cultural sensitivity, language skills and desire to provide quality care..

- \* CHW- the Community Register is an important first step in the information system SNIS, but many of the Registers are not accurately filled out, especially in cases of AR1 and diarrhea. Little tracking is done of outcome of cases and a review of the registers showed only 1% of cases being referred.

\* RANs- no mechanism of counter-reference exists, so that followup of cases is very difficult. The RAN rarely knows if a patient that has been referred actually followed through with the referral.

A system of reference and counter-reference needs to be developed which works both up and down. The system should provide mechanisms for followup of patients and the upper levels should utilize their available human resources by referring patients for followup care to the CHW.

PLAN has made positive steps as a temporary liaison between the communities and the MOH. By providing an incentive to community members to attend courses (lunch/snack) PLAN has brought the two groups together and improved communication and understanding. Quality care at health services will be the incentive in the future as communities begin to see the MOH as a source of assistance in resolving their medical problems.

#### 4.12 PVO/NGO NETWORKING

PLAN is a founding member of PRGCOSI, a local health NGO network with 24 members. PLAN is very active in PROCOSI which has resulted in a close working relationship with both national and international NGOs.

One of PLAN's strengths has been in the mobilization of resource sharing with other NGOs in Bolivia, particularly those working in health, credit, and agriculture projects. Educational materials have been developed with other NGOs and PROCOSI, and a great deal of information and technical assistance comes from these very dynamic relationships. PROCOSI plays an important role in avoiding duplication of effort between NGOs.

One of PLAN's strategies outlined in the DIP was the organization of district level interinstitutional development committees. The original plan was for the formation of two committees but only one committee has been formed in the Santiago de Machaca district. Members of this committee include: PLAN Altiplano, health district, Equipo de Salud Altiplano, Choquenaira, Norwegian Mission Alliance, and Samacmancafiani. The objective of this committee is to maintain close coordination in order to avoid duplication of efforts, to share educational materials and methodologies and insure consistency of educational messages.

The committee met every two months during 1994, but will only meet once every 6 months due to other commitments on the part of the director of the health district. There is no representation on this committee of community members or leaders.

#### 4.13 BUDGET MANAGEMENT

The total USAID grant budget for this cs-IX project is \$295,901 (direct costs, not including indirect), PLAN has spent during the first twenty two months of the grant period a total of \$205,450 or 69% of the total. The remaining fourteen months of the project will be financed with \$90,451 (direct costs, not including indirect) or 31% of the total.

In view that expenses are normally higher during the first year of the budget, PLAN has spent the budget at an acceptable rate and anticipates no problem in completing revised project objectives and spending the budget by the end of the grant period.

The budget was revised and approved by USAID after the first annual report and due to recommendations being presented in this MTE a modification in line items may be necessary as some slight changes in strategy will be needed, i.e. not contracting Traditional Healers.

The Country Project Pipeline Analysis is included in Annex E.



## 5. SUSTAINABILITY

The PLAN project has sought to identify strategies which will lead to sustainable activities after funding terminates. The MOH is well aware of the need for developing innovative programming which decreases dependency on outside funding. Unfortunately, these concepts are difficult and many times untried. The project continues to struggle with these issues.

During the MTE, community leaders in focus groups and CHWs in interviews were asked for their ideas on sustainability. The most commonly mentioned answer from CHWs (37%) and the second most common answer from leaders (19%), was trained human resources in the community. The second most commonly mentioned idea **was** coordination with state institutions, MOH or municipalities. An interesting idea from 11% of the CHWs was traditional medicine.

In looking at these three points, PLAN has been instrumental in strengthening them all. PLAN has successfully transferred activities to the MOH through close coordination and support and is beginning to work on a municipal level. The training of human resources is an on-going process, but PLAN has developed curriculum and materials, and trained trainers at the area and district levels. Traditional medicine has been a focus of the project, and the results are seen with increased appropriate home treatment of ARI and diarrhea.

Replicability is closely related to sustainability. As PLAN moves into new areas in the future, many experiences from this CS-IX grant can be used to enhance strategies for implementation of health activities. By utilizing more punctual strategies, costs can be lowered in both the short and long term. One of the most important lessons from this project has been the importance of a detailed baseline study which includes identification of resources, to avoid duplication of services, and a prioritization of needs so that interventions can be selected based on prevalence of diseases.

As the strength of PLAN lies in integration, care should be taken to assure that all three of PLAN's components; health, education and economic development are present in all communities.

The strategy adopted by PLAN of working on a district level has been very beneficial in having the most impact for the investment. By strengthening systems within the district, information, referral and supervision, a more long lasting and far-reaching impact is seen, not just in specific communities but in all communities within the district.

Through the integration of programs within PLAN, the institution has the unique opportunity to combine health with credit programs. PLAN works with two other NGOs, experts in credit; Freedom from Hunger, operated 50 community banks in 40 communities in coordination with PLAN; and PROMUJER, operated 60 community banks in peri-urban areas of La Paz (which have no overlap with this USAID grant)

The methodology of community banks goes directly to the woman, and as can be seen from the following chart, from an evaluation of Freedom from Hunger, serves to reinforce activities in health and education. By combining the two programs, PLAN is developing a model of sustainability that should be further studied and supported in the future.

#### USE OF PROFITS FROM COMMUNITY BANKS

Use of Profits	TOTAL	%
Food	30	43 %
Health	11	16 %
Education	8	12 %
Clothing	7	10 %
Reinvest in Business	5	7 %
Family Savings	3	4 %
Housing	3	4 %
Others	3	4 %
TOTAL	70	100 %

Source: "CREDIT WITH EDUCATION FOR WOMEN"  
 BY: FREEDOM FROM HUNGER, February 1995

The sustainability plan presented in the DIP is analyzed on the following page.

# INDICATORS OF SUSTAINABILITY

GOAL	END OF PROJECT OBJECTIVE	STEPS TAKEN TO DATE	MID-TERM MEASURE	STEP NEEDED
CHWS, RANS and Physicians supervised monthly	210 CHWs 60 RANs 12 Physicians	Supervision forms developed and implemented Training held	56% of CHWs report they have not been supervised 50% of RANs report they are supervised every 1 to 3 months	Improved concept of supervision as positive Monitoring of supervision system
CHWs, RANs and Physicians participating in training	210 CHWs 60 RANs 12 Physicians	Training course held at all levels, materials developed	All CHWs and RANs interviewed had received some training during the past year	Improved tracking of training which has been received Evaluation pre- and post-training
Sectors and Areas w/ monthly CAI and where CHWs and community leaders participate	64 Sectors 11 Areas	Strengthening of CAI system Forms for consolidation of information Training in management of CAIs	74% of CHWs attended CAI last month and the majority could mention objective of the meeting	Community leaders need to be involved on a regular basis, not just occasionally
Communities using Community Register, transmitting info to RAN, receiving feedback and using data to make decisions	244 communities	Registers implemented and CHWs trained Feedback instrument available in each community	67% of CHWs are not using the feedback instrument 29% of leaders have used the feedback instrument in meetings	Communities need to be taught HOW to use information so the feedback becomes important to them

## 6. RECOMMENDATIONS

### GENERAL RECOMMENDATIONS

**\*\* The first** priority of the project should be **to review the current** objectives and make revisions as necessary to bring the activities of the project into line with current MOH policy. The following is a table which presents suggestions for revision of the objectives.

INTERVENTION	OBJECTIVES - DIP	RECOMMENDATIONS
1. E.P.I.	1.2. 40% Women fertile age with TT5	80% of pregnant women TT2
4. A.R.I.	4.1. 80% of children (0-23 months) with cough and rapid breathing identified by the mother will be referred to CHW or health center.	60% of children (0-23 months) with cough and rapid breathing identified by the mother will be referred to CHW or health center.
5. MATERNAL HEALTH	5.2. 80% of pregnant women with hemorrhage or infection will be treated by trained TBAs and referred to health center.	Eliminate this objective as it is not in accordance with MOH policy.
	5.3. 80% of pregnant women with these complications will be treated according to MOH protocol.	Eliminate this objective as there is not sufficient documentation to justify these actions as a fundamental part of the project.
	5.4. 30% of detected pregnancies will have at least one prenatal visit with a TEA or CHW.	Eliminate this objective as it is not in accordance with MOH policy.

**\*\* More emphasis** is needed on quality in all aspects of the project, including; information, referral and supervision systems. Training in quality care management should be provided to district personnel

with followup for appropriate implementation. Technical assistance from experts in the field of quality care should be contracted and simple instruments be developed to monitor quality care at all levels.

\*\* Efforts should continue to enter into a formal agreement with the Ministry of Education, this is an excellent strategy for expanding the impact of the project by utilizing rural teachers to teach children basic health messages. The material for this activity has already been developed (Libro Para La Vida Escolar) which is of excellent quality. There also exists interest on the part of school teachers to coordinate activities.

\*\* Additional effort needs to be made in strengthening:

- 1) nutrition messages-concrete actions that the parents of children with growth problems can realistically use.
- 2) ability of both men and women to recognize the four signs of danger during a pregnancy (Fever, edema, hemorrhage, headache)
- 3) identification by mothers of when to refer cases of diarrhea and respiratory infections to a health center
- 4) an understanding of what a prenatal visit consists of and why it is important

\*\* The communities need to become more involved in all aspects of the project. A good way to begin is to have meetings on an area level to feedback to the communities the result of this evaluation and develop a Plan of Action with their input. An important role of PLAN in the communities is to teach them to use information in an analytical way which permits them to make decisions based on a causal analysis. With the implementation of the Law of Popular Participation, PLAN should play an active role in utilizing the instruments which they now have (SISPLAN, Community Information System, community planning and CAIs) to help guide the communities toward a better understanding of community assessment, prioritization and project planning which will be vital in the future with the implementation of the new law.

## SPECIFIC RECOMMENDATIONS

### MATERNAL HEALTH

In order to expedite the use of clean birth kits, without limiting the use of kits as a way to encourage prenatal care, PLAN and the MOH should implement a policy that kits will be given after two visits or during the eighth month of pregnancy.

Include an example of a clean birth kit with the maternal health flipcharts, to be used for demonstrations.

PLAN and the MOH should study the strategy used by Misiones Mundiales of charging a set price for one prenatal visit, which includes the right to two more follow-up visits for free. This may work to increase the number of prenatal visits.

As a complementary activity to maternal health, PLAN should seek out opportunities to strengthen activities in reproductive health and family planning. PLAN is in a position to seek additional funds through PROCOSI which could be used in the two districts to train personnel and develop effective strategies.

#### EDUCATION

Instead of providing food at training courses, PLAN should investigate other strategies for motivating communities to attend educational sessions. Handouts related to the topic could be reproduced and given out at courses which would also serve to generate interest.

#### INFORMATION SYSTEM

PLAN should focus more on analysis of the quality of information being generated by the SNIS and develop methodologies for verification of information. The software for the SNIS is available to PLAN and it is recommended that a copy be installed in the office for future reference.

The quality of the data collected and its feedback at the community level needs to be further strengthened in order to generate in-depth analysis of the information and to teach the community how to use the information in their decision making process. PLAN's internal data collection system for donors (SISPLAN) should be utilized and integrated with the current health system at the community level as it also contains a process for community analysis and use of information. The two systems will serve to strengthen the concept of how to make decisions based on community information. (See Annex B)

Train CHWs in more pro-active methodologies for reaching out to all community members through home visits, use of Hoja Domiciliaria, recreational activities, etc., in order to improve services, identification of newborns, and information being collected.

A supervision/monitoring workshop would be a good format to use in establishing objectives and methodologies of supervision. The form now use should be modified to include a space for the signature of the person receiving the supervision and a copy of the form should be left with that person. Involve community leaders in the supervision process so they they are made aware of problems and support that the CHW may need.

According to the focus groups of leaders during the MTE, almost all communities could mention some way of providing support (either financially or in time or products) to the CHWs. Leaders need to be better trained in specific action which they can take to improve health activities in the community. The training, which they have received has been very general. What is needed are specific guidelines.

## 7. SUMMARY

The evaluation team consisted of 7 representatives from PLAN, two external consultants, 2 nurses from the MOH, and 2 doctors from the MOH. A complete listing of the evaluation teams, instruments used, and field activities completed, is included in Annex F. One day was utilized, before beginning data collection, to develop evaluation strategies and two days during the evaluation to analyze the information and formulate conclusions and recommendations. Focus groups, key informant interviews, a survey of mothers with children under two, document review, and observation were the methodologies utilized during field visits.

It is being recommended that all evaluation results be analyzed by PLAN, other NGOs, and MOH staff and community representatives during workshops in each geographical area. The principal author of the evaluation was Renee Charleston, with input from Jose Carreño, and the entire evaluation team. Total cost of the evaluation was approximately \$ 12,000.

Main project strategies include; institutional strengthening through the improvement of referral, supervision, information and logistics systems in 2 health districts, continued implementation of 5 Child Survival interventions in conjunction with the MOH, and education in all levels, with PLAN serving in a training capacity, and supervision and monitoring of project activities.

Major project accomplishments include; excellent educational materials and methodologies, good progress in teaching positive in-home treatment for respiratory and diarrheal infections and good vaccine coverage.

The main limitation to reaching end of project objectives is that many objectives are not in line with current MOH policies. Objectives should be reviewed by PLAN and revised. The structures are in place for improved systems but they lack sufficient training for effective implementation. During the next 12 months focus should be on improving the quality of services at the community and health center levels through the use of expert technical assistance. An additional recommendation was to include the communities more in all aspects of the project. An important role of PLAN in the communities is to teach them to use information in an analytical way which permits them to make decisions based on a causal analysis. With the implementation of the Law of Popular Participation, PLAN should play an active role in helping to guide the communities toward a better understanding of community assessment, prioritization and project planning which will be vital in the future with the implementation of the new law.